tongue. The first symptoms of hoarseness and dyspnœa began four years ago. In November, 1874, he came into the Surgical Clinic with severe dyspnœa, cyanosis, and symptoms of impending suffocation, and the diagnosis of carcinoma was made. As the patient refused to have the larynx removed at that time, tracheotomy only was performed, and he went out relieved in January. In July, 1875, he returned, still wearing the canula, but unable to swallow anything except liquid food. The larynx was swollen, broadened, and hard externally, and at the back of the tongue an uneven lobulated growth could be both seen and felt. His strength and general condition were favourable. The tracheal opening in the neck was, before the operation, continued downwards, and the trachea above the opening plugged with an air-bag, so as to prevent any downflow of blood into the bronchi. The patient was then narcotized by chloroform administered through a canula, and was kept completely unconscious for two hours. Langenbeck made a horizontal incision two centimetres above the hyoid bone, and extending from one sterno-mastoid muscle to the other, and bisected it by a vertical incision. The skin was then thrown back in two flaps, and the larynx dissected out, beginning from above and working downwards, so that the trachea just below the cricoid cartilage was the last part separated. The whole larynx, with the epiglottis, the hyoid bone, and the posterior third of the tongue, as well as the anterior and laterial portions of the pharynx, with the pharyngo-palatine arches, and a small piece of the œsophagus, were then removed.

The following muscles were divided, without reckoning the small laryngeal muscles: The sterno-hyoid and -thyroid, the omo-hyoid and mylo-hyoid, the digastric, genio-hyoid, stylo-hyoid and stylo-glossi, the stylo-pharyngei, and the glosso- and pharyngo-palatine. Forty-one arteries were ligatured, including both external carotids, which were each doubly ligatured and divided between the ligatures; and both phyo-glossal and lingual nerves were cut through. Both submaxillary glands were also removed. Langenbeck lays great stress on the operation being conducted from above downwards, as it enables the surgeon to lay bare the greater number of vessels, and to ligature them before they are cut, and so spare as much bleeding as possible. The preparatory plugging of the trachea is also all-important.

The excised portion of the larynx and tongue measured eleven centimetres in length, and the piece of tongue three centimetres, the incision being carried in front of the circumvallate papillæ.

After the operation, the immense wound was simply closed by compresses soaked in a one-third per cent. solution of salicylic acid, and no attempt was made to bring the skin together with sutures. The patient's condition on July 22, the day after the operation, was remarkably good (pulse 100), and he was able to take abundance of liquid nourishment through a tube passed into the œsophagus. On July 28 his progress was still good, and he had no fever. A two per cent. solution of boro-salicylic acid was being used to swab the pharynx and diminish the abundant purulent secretion from the surface of the wound.

This is the fourth case of excision of the larynx. Billroth, of Vienna, in 1873, was the first to perform the operation; he was followed by Heine, of Prague; and in 1874, Dr. Moriz Schmidt, of Frankfort-on-the-Maine, removed the greater portion of the larynx of a man of thirty-six for carcinoma. The patient died five days afterwards. In case his patient goes on well, Professor Langenbeck intends to wait until the wound has completely cicatrized before he attempts to adapt an artificial larynx.—*Medical Times and Gazette*, Aug. 28, 1875.

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57. *Inquiry into the Condition of Fifty-one Cases of Lithotrity in Elderly Adults, made at Periods of one or two years after Operation.*—Sir HENRY THOMPSON has published (*Lancet*, July 3, 1875) his interesting inquiry on this subject, with a view of ascertaining whether the results were permanent.

During a period of seventeen months, Sir Henry performed lithotrity on 53 patients, of whom two died, leaving 51 recoveries. "The mean interval between the date of operation and the present report of condition, for these

51 cases which are the subject of inquiry, is, therefore, about twenty months instead of 'one year.' An examination of these cases, given in a tabular form below, shows that respecting six patients I have been unable to obtain the information required; but the weight of such evidence as exists relative to these is greatly in favour of their being better and not worse than the average, since their mean age is only fifty-four years, nearly ten less than the mean of the whole series. As I am compelled to omit these from my reckoning, I believe that my report is less favourable to lithotrity than it ought to be.

"The number of individuals, then, of whom I have precise information, is 45, averaging about sixty-four years of age. Of these, 11 have since died. The causes, certified by their medical attendants, were—2 of organic heart disease; 1 of malignant disease; 1, at eighty, of natural decay; the other 6 of urinary disorders and advanced age together (the mean age being sixty-six years). All but one of these latter were individuals who for several years had passed no urine except by catheter, who owed their lives solely to surgical art, and who without it must have died miserably some years before. The prolongation of life had been entirely due to the improved modern means of mechanically removing retained urine and accumulated phosphatic deposits. Of the 45, 34 are living still; 28 of them enjoying good health and active existence, at a mean of sixty-three and a half years of age. The other 6 have some signs of recurring calculus, 2 having had a newly formed calculus removed; all are well but one of these, who is in bad health and suffers much.

"I think I may leave these figures to speak for themselves. I shall make one observation, however, which, although a very natural one, does appear not to receive the consideration which I think it deserves. Supposing that these 53 cases of lithotrity (including 2 deaths with 51 recoveries) had been cut instead of crushed, how many fatal cases would have followed the operation? Their average age being sixty-three, 14 deaths would not have been a bad result, somewhat better than published tables offer us.[1] But after these operations, mainly done in 1873, only 11 deaths have since occurred *up to the present date.* And even if we were to reckon all these as deaths resulting from the operation, although, as may be seen below, they were quite unconnected with it, we still should have a total of recoveries larger than after lithotomy. There is, however, much reason to believe that the few examples of chronic cystitis with recurring phosphatic deposits, subsequent to lithotrity, occur generally in those feeble and diseased persons to whom lithotomy is most commonly fatal. The fact is, that almost all those patients whose subsequent troubles remain, and who, to superficial observers, appear to discredit lithotrity, do in reality owe their existence to the operation, and are trophies of life absolutely saved by it.

"Thus it is that lithotrity, as I have observed, has created a new set of cases —men who, until the process was brought pretty nearly to its present perfection, never lived. Respecting them I should like to write the results of my experience, and hope ere long to do so. They are men whom lithotrity keeps alive—who, thanks to the ease and safety with which a small and newly formed phosphatic calculus can be crushed, go on for years to live and even to be active. These cases have to be kept apart from other cases of stone, because it would invalidate any inference from numerical statements were a surgeon to reckon as a 'case of lithotrity' each time, perhaps twice a year or more, he removed a calculus from such a patient, although it might not always necessarily be very small. But it is not to be forgotten that before the time of lithotrity there was no adequate help for such a patient except by the cutting operation, and many such died miserably with bladders filled with phosphatic material."

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58. *Treatment of certain Cases of Stricture of the Urethra by a Combination of Internal and External Division.*—Mr. THOMAS ANNANDALE remarks (*Ed. Med. Journ.*, June, 1875) that the recognized treatment of stricture of the urethra, complicated with numerous fistulous openings and great thickening of the perineal and scrotal tissues, is a free external division of the perineum

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[1] I may refer to my own table of 1827 cases, collected with great care, among others, as supporting this view. "Lithotomy and Lithotrity," 2d edit., p. 142.